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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,601	09/10/2004	Michael Stosser	258516US0PCT	4906
22850	7590	05/10/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			KEYS, ROSALYND ANN	
			ART UNIT	PAPER NUMBER
			1621	

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/506,601

Applicant(s)

STOSSER ET AL.

Examiner

Rosalynd Keys

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413).
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/10/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Status of Claims

1. Claims 1-6 and 8-15 are pending.
Claims 1-6 and 8-15 are rejected.
Claim 7 is canceled.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on September 10, 2004 has been considered by the examiner.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 1621

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
7. Claims 1-6 and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Le-Khac (US 5,470,813) in view of Combs et al (US 6,821,308 B2).

Le-Khac disclose polyether polyols which are prepared by polymerizing an epoxide with a hydroxyl group containing initiator in the presence of a double metal cyanide catalyst (see entire disclosure, in particular column 6, lines 12-39; column 7, lines 2-12; example 7 and Table 4). Butene oxide is disclosed as a suitable epoxide (see column 6, lines 12-17). Polyether polyols having an unsaturation content of greater than 6 mol% is disclosed (see column 7, lines 2-12 and Table 4). The limitations of Claim 5 are considered to be inherent to polyethers having the claimed unsaturation.

Le-Khac fails to expressly disclose a polyether obtained by reacting a butene oxide with an alcohol that has an unsaturated content of 6 mol% or more. However, Le-Khac does clearly suggest such polyethers.

Le-Khac further fail to disclose use of the polyethers as a carrier oil for gasoline fuels.

Combs et al. (US 6,821,308 B2) disclose that polyoxyalkylene monoethers and their derivatives are well known and widely used as components of fuel additives (see column 1, lines 13-20).

Art Unit: 1621

One having ordinary skill in the art at the time the invention was made would have found it obvious to utilize the polyether polyols of Le-Khac as a carrier oil in gasoline, since Combs et al. teach that polyether polyols are well known and widely used as components of fuel additives. The selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945).

NOTE: The Examiner has taken into consideration the teaching of Combs et al. that the use of polyoxyalkylene monoethers containing less than about 6 mole percent of alkoxyated unsaturates offer substantial advantages for fuels. The Examiner does not believe that this disclosure is a teaching away from the instant invention because Combs et al. recognize that polyoxyalkylene monoethers containing more than 6 mole percent of alkoxyated unsaturates are suitable for use in fuels (see for example column 1, line 53 to column 2, line 9). Combs et al. just believe that polyoxyalkylene monoethers containing less than about 6 mole percent of alkoxyated unsaturates are more advantageous than those containing more than 6 mole percent of alkoxyated unsaturates. Thus, although Combs et al. express a preference for using polyoxyalkylene monoethers containing less than about 6 mole percent of alkoxyated unsaturates, at the same time Combs et al. provides the motivation for one of ordinary skill in the art to focus on the unsaturated content and to explore levels above that range.

The Applicants attention is directed to the following statement taken directly out of section 2144.05 (III) of the MPEP:

"A prima facie case of obviousness may also be rebutted by showing that the art, in any material respect, teaches away from the claimed invention. In re Geisler, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997) (Applicant argued that the prior art taught away from use of a protective layer for a reflective article having a thickness within the claimed range of "50 to 100 Angstroms." Specifically, a patent to Zehender, which was relied upon to reject applicant's claim, included a statement that the thickness of the

Art Unit: 1621

protective layer "should be not less than about [100 Angstroms]." The court held that the patent did not teach away from the claimed invention. "Zehender suggests that there are benefits to be derived from keeping the protective layer as thin as possible, consistent with achieving adequate protection. A thinner coating reduces light absorption and minimizes manufacturing time and expense. Thus, while Zehender expresses a preference for a thicker protective layer of 200-300 Angstroms, at the same time it provides the motivation for one of ordinary skill in the art to focus on thickness levels at the bottom of Zehender's suitable' range- about 100 Angstroms- and to explore thickness levels below that range. The statement in Zehender that [i]n general, the thickness of the protective layer should be not less than about [100 Angstroms]' falls far short of the kind of teaching that would discourage one of skill in the art from fabricating a protective layer of 100 Angstroms or less. [W]e are therefore not convinced that there was a sufficient teaching away in the art to overcome [the] strong case of obviousness' made out by Zehender."). See MPEP § 2145, paragraph X.D., for a discussion of "teaching away" references."

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Campbell (US 4,877,416) disclose a synergistic fuel composition comprising a polyoxyalkylene alcohol (see entire disclosure, in particular column 6, lines 18-63).

Dexheimer (US 6,919,486 B2) disclose that the use of DMC catalyst allow one to achieve unsaturations in the range of 0.003 to 0.010 meq/g KOH (see column 1, lines 51-57).

Yamada et al. (US 7,012,164 B2) disclose preparing polyether polyols in the presence of DMC catalysts, which have a degree of unsaturation of at most 0.04 meq/g (see entire disclosure, in particular column 3, line 4 to column 4, line 12 and column 8, lines 47-56).


Heider et al. teach preparing polyether alcohols by ring opening polymerization of epoxides by means of OH-functional starters using DMC catalyst (see entire disclosure, in particular paragraphs 0001, 0009, 0019-0048, and 0062). The polyether alcohols have use as carrier oils in fuel additive mixtures.

Art Unit: 1621

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosalynd Keys whose telephone number is 571-272-0639. The examiner can normally be reached on M-W & F 4-10pm; H 5:30am-5pm; Sat 8am-1pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Rosalynd Keys
Primary Examiner
Art Unit 1621

May 6, 2006